Dipl.-Chem. Hartmut Braun
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34 GÖTTINGEN, DEN 26.9.1973
WINDAUSWEG 2
RUF: 23466-69 Ke.

To

Prof. Dr. Joshua Lederberg
Stanford University School of Medicine
Department of Genetics

Stanford, California 943o5

USA

Dear Dr. Lederberg,

Thank you very much for your letter of March 26 with the detailed information about your field and especially the description of the computer program DENDRAL.

The reason for my answering with a delay of several months is that Dr. Armin de Meijere of your department, who is particularly interested in rearrangements of C_nH_n hydrocarbons, recently spent one semester as a visiting professor at the University of Wisconsin in Madison. He originally initiated my writing to you last year and he returned to Göttingen from the U.S. only a few weeks ago. I should mention that my own research is mainly concerned with the problem of internal rotation in small ring molecules. Since during my work I have accumulated some experience in computer programming and the application of data processing in chemistry, Dr. de Meijere approached me some time ago with the problems he encountered in his research on the rearrangements of several C_nH_n families: He synthesized the new hydrocarbon diademane some time ago and studied its thermal, photochemical and transition metal catalyzed rearrangements. Now he is concerned with the synthesis of several highly symmetrical $C_{12}H_{12}$ hydrocarbons, e.g. (1) and (2). Since the key step in this approach to (2) will be a photochemical rearrangement for some ohter $C_{12}H_{12}$ isomer,

(1)

(2)

he wanted to have a complete list of all possible valence isomers of [12]-annulene. This list would be extremely helpful for the structure assignment of new isomers that one would certainly come across in the $C_{12}H_{12}$ family. In the meantime, however, A.T.Balaban (Rev. Roumaine Chim. 17, 865 (1972)) has published such a complete list and in a way helped to solve some of our problems. At the moment, therefore, it would be unnecessary to make use of your programs. Should there be any new problems of this kind in the future, I shall contact you again. Thank you very much for offering your help.

Personally I am very interested in the application of computers to solve chemical problems and therefore in your kind of research. I am planning to spend a year or two in the U.S. as a postdoctoral fellow starting in 1974. So far I have applied only at one place on the East Coast and I do not know the result yet. Should I be accepted I might also have an opportunity to travel to California to visit some friends in San José. May be I could by in Stanford and learn a little more about your stimulating work.

Thank you again for your kind help and the material about your computer program.

Sincerely yours,

H Braun

(Dipl.-Chem. Hartmut Braun)

P.S.: Under separate cover I am sending you reprints of some papers by A. de Meijere et al. which deal with some aspects of $C_{10}H_{10}$ rearrangements.